



UNITED STATES PATENT AND TRADEMARK OFFICE

Eel

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/815,609	03/23/2001	Jun Itoh	FUJH 18.454	7200
26304	7590	01/30/2006		
KATTEN MUCHIN ROSENMAN LLP 575 MADISON AVENUE NEW YORK, NY 10022-2585			EXAMINER GREY, CHRISTOPHER P	
			ART UNIT 2667	PAPER NUMBER

DATE MAILED: 01/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/815,609

Applicant(s)

ITOH, JUN

Examiner

Christopher P Grey

Art Unit

2667

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Responsive to the amendment filed on September 28, 2005, amended claims 1, 2, 3 and 5 have been entered as requested.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Feuerstraeter et al. (US 6285659) in view of Kim (US 5519689)

Claim 1 Feuerstraeter et al. (Feuerstraeter 'hereinafter') discloses a negotiation logic and protocol controller for selecting/negotiating (correcting) an appropriate protocol for the connection of two network devices (subscribers). Feuerstraeter discloses establishing a difference in speed (quality of service) in order to negotiate a connecting protocol (Col 4 line 62- Col 5 line 4 and Col 5 line 56- Col 614 and Col 6 lines 56- Col 7 line5). Feuerstraeter discloses an indication of error (control information) being sent to the protocol controller (Col 8 lines 46-55). Feuerstraeter does not disclose performing connection admission control and usage parameter control. Feuerstraeter also does not disclose transmitting quality control information to the terminating subscriber.

Kim discloses a user network interface apparatus performing connection admission control and usage parameter control (Col 4 lines 40-45) based on quality of service (Col 5 lines 23-37). Kim also discloses generating a bandwidth (quality of service) control signal to the terminating user (Col 5 lines 38-61 and Col 12 line 61- Col 13 line 44).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the negotiation logic and protocol controller of Feuerstraeter with the connection control unit and traffic control unit (Col 5 lines 23-62) disclosed by Kim. The motivation for this modification is to provide a more efficient means of traffic control and effectively connect subscribers requiring various services (Col 4 lines 22-38).

Claim 2 Feuerstraeter discloses a number of protocols being supported (predetermined) by each link (Col 8 lines 46-55) and re-negotiation taking place to achieve a lower rate protocol (Col 6 line 56- Col 7 line 5). The motivation is the same as that for claim 1.

Claim 3 Feuerstraeter discloses a first device (subscriber) sending a first protocol to a negotiator connected to a protocol controller, and a second protocol being selected (mapped) corresponding to a second device (Col 4 line 62- Col 5 line 4 and Col 5 line 56- Col 6 line 14 and Col 6 lines 56- Col 7 line 5). One skilled in the art can appreciate the second protocol being an interoffice protocol or a terminating subscriber protocol. One skilled in the art can also appreciate the second protocol being further mapped to a terminating subscriber. However, Feuerstraeter does not specifically disclose an interoffice protocol.

Kim discloses an ATM exchange which one skilled in the art can appreciate having a separate protocol (adaptation layer protocol) from original and terminating subscriber protocol (Col 4 lines 52-55 and Col 2 lines 5-34).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the negotiator and protocol controller (mapping) disclosed by Feuerstraeter with the ATM switching disclosed by Kim. The motivation for this modification is to achieve a more efficient means of traffic control and effectively connect subscribers requiring various services (Col 4 lines 22-38).

Claim 4 Feuerstraeter discloses a negotiation logic and protocol controller for selecting/negotiating (correcting) an appropriate protocol for the connection of two network devices (subscribers). Feuerstraeter discloses establishing a difference in speed (quality of service) in order to negotiate a connecting protocol (Col 4 line 62- Col 5 line 4 and Col 5 line 56- Col 6 line 14 and Col 6 lines 56- Col 7 line 5). Feuerstraeter discloses an indication of error (control information) being sent to the protocol controller (Col 8 lines 46-55). One skilled in the art can appreciate a controller and a logic containing a database, but Feuerstraeter does not specifically disclose a database, and furthermore, Feuerstraeter does not disclose connection admission control and usage parameter control and transmitting the quality control information to the terminating subscriber.

Kim discloses a number of databases, including a multi-rule database (element 50 in Fig 5 and Col 10 line 44- Col 11 line 5). Kim discloses a user network interface apparatus performing connection admission control and usage parameter control (Col 4

lines 40-45) based on quality of service (Col 5 lines 23-37). Kim also discloses generating a bandwidth (quality of service) control signal to the terminating user (Col 5 lines 38-61 and Col 12 line 61- Col 13 line 44).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the negotiation logic and protocol controller of Feuerstraeter with the connection control unit and traffic control unit (Col 5 lines 23-62) disclosed by Kim. The motivation for this modification is to provide a more efficient means of traffic control and effectively connect subscribers requiring various services (Col 4 lines 22-38).

Claim 5 Feuerstraeter discloses a number of protocols being supported (predetermined) by each link (Col 8 lines 46-55) and re-negotiation taking place to achieve a lower rate protocol (Col 6 line 56- Col 7 line 5). The motivation is the same as that for claim 4.

Claim 6 Feuerstraeter discloses a first device (ATM switching system) sending a first protocol to a negotiator connected to a protocol controller, and a second protocol being selected (mapped) corresponding to a second device (Col 4 line 62- Col 5 line 4 and Col 5 line 56- Col 6 line 14 and Col 6 lines 56- Col 7 line 5). One skilled in the art can appreciate the second protocol being an interoffice protocol or a terminating subscriber protocol. One skilled in the art can also appreciate the second protocol being further mapped to a terminating subscriber. However, Feuerstraeter does not specifically disclose an interoffice protocol.

Kim discloses an ATM exchange which one skilled in the art can appreciate having a separate protocol (adaptation layer protocol) from original and terminating subscriber (Col 4 lines 52-55 and Col 2 lines 5-34).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the negotiator and protocol controller (mapping) disclosed by Feuerstraeter with the ATM switching disclosed by Kim. The motivation for this modification is to achieve a more efficient means of traffic control and effectively connect subscribers requiring various services (Col 4 lines 22-38).

Response to Arguments

3. Applicant's arguments filed on September 28, 2005 have been fully considered but they are not persuasive.

(a) In response to the applicants arguments that the cited art does not disclose the applicants claimed, "correcting the difference between a subscriber signaling protocol supporting said originating subscriber and a subscriber signaling protocol supporting said terminating subscriber."

The examiner maintains that the same limitation in its broadest term has already been discussed within the rejection of claim 1, wherein Feuerstraeter discloses a repeater hub for negotiating a protocol for connecting network devices (Col 5 line 56-Col 6 line 5). Feuerstraeter discloses the repeater hub comprising error detection logic for determining that there is an error in the link connecting two network devices (Col 8 lines 23-44). It would have been obvious to one of the ordinary skill in the art at the time of

the invention that either the transmitting or receiving protocol has achieved some form of error or difference which has caused the quality of transmission or reception to degrade.

Feuerstraeter further discloses correcting an error (difference) by renegotiating (QOS correction principle) a protocol for the given link (Col 8 lines 46-55), where negotiation includes selecting a suitable protocol (Col 9 lines 13-63 and Col 6 lines 40-55).

(b) In response to the applicant's arguments that the cited art does not disclose the applicants claimed, "in an ATM switching system".

The examiner maintains that the same limitation in its broadest term has already been discussed within the rejection of claim 1, wherein Feuerstraeter discloses a fast speed communication system implementing a method for determining a suitable protocol (Col 6 lines 30-39). Therefore it would have been obvious to one of the ordinary skill in the art at the time of the invention that protocol negotiation is necessary in most high-speed network technologies including that of ATM, where ATM switching system is disclosed in the rejection with reference to Kim.

(c) In response to the applicant's arguments that the cited art does not disclose the applicants claimed, "determining a quality of service correction principle to correct the difference between subscriber signaling protocols supporting originating and terminating subscribers."

The examiner maintains that the same limitation in its broadest term has already been discussed within the rejection of claim 1, wherein Feuerstraeter discloses a

repeater hub having knowledge of each network devices supporting protocols (Col 5 lines 6-Col 6 line 5), where in allowing communication between two network devices, the repeater hub negotiates a common protocol for connection. Feuerstraeter discloses a correction principle in that when an error is detected a renegotiating procedure is performed (Col 6 lines 40-55 and Col 8 lines 34-45).

(d) In response to the applicant argument that the cited art fails to fully disclose the QOS correction principle.

The examiner asserts that claim 1 indicates a QOS correction principle, however does not give enough detail to distinguish the claimed principle with any other correction principle known in the art.

(e) In response to the applicant's arguments that the cited art gives no clear motivation.

The examiner asserts that it would have been obvious to one of the ordinary skill in the art at the time of the invention to combine the controller comprising a negotiation logic and detection logic (Col 9 lines 13-33) as disclosed by Feuerstraeter with the connection/ traffic control unit as disclosed by Kim. The motivation for this combination is to select a suitable protocol and detect network limitations (Col 1 lines 5-10).

(f) In response to the applicant argument that the cited art does not disclose the applicants claimed, "mapping declaration data in a subscriber signaling protocol"

The examiner maintains that the same limitation in its broadest term has already been discussed within the rejection of claim 3, wherein Feuerstraeter discloses link pulses being received by the repeater containing information indicating the protocol.

Feuerstraeter further discloses the repeater using this link pulse to select a protocol (Col 5 line 56-Col 6 line 5).

(f) It is unclear to the examiner what is being argued in claim 4, however the examiner believes that there is more than enough responses to the applicants arguments to cover and clarify the scope of the rejection of claim 4.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(a) Drake et al. (US 6094687) discloses an ATM network that joins two nodes (subscribers). Drake et al. discloses a profile table within the ATM network that contains quality of service information about both nodes, and assists in establishing a connection.

(b) Yamada et al. (US 6415313) discloses a system for deciding the communication quality between two network end systems based on protocol information and quality of service.

(c) Rajifu et al. (JP app no. 06163510) discloses a controller for providing use parameter control over an ATM network, and for holding a desired service of quality level over an expected service range.

5. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


Art Unit: 2667


6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P Grey whose telephone number is (571)272-3160. The examiner can normally be reached on 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (571)272-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher Grey
Examiner
Art Unit 2667


1/19/06


CHI PHAM
SUPERVISORY PATENT EXAMINER
1/20/06